TELEGRAM

Foreign Service of the United States of America

INCOMING

TELEGRAM

Foreign Service of the
United States of America

OUTGOING

MEMORANDUM FROM GARRY COHEN

JEDDAH, SAUDI ARABIA 13 February 1958

TO: MR. ROLAND F. COHEN, USOM, JIDDAH, SAUDI ARABIA

Dear Jerry:

With further reference to the fertilizer project, I find a note in a recent letter from our New York office stating that a Mr. Kletzker, of the Department of Commerce, recently told our people that the bid date of the call for bids has been extended to 1 March 1958 from 1 February 1958, and the size of the plant has been cut to 180,000 tons of ammonia sulfate instead of 450,000 tons per annum. Kletzker also made the comment that his discussions with financial people have indicated that the possibility of the Government getting the requisite money for this project is nil.

The call for bids stated that 15 million SCFD (standard Cubic Feet Per) High pressure gas and 5 million SCFD low pressure gas will be available from the Qatif Field. Our production people tell me that we cannot guarantee more than 12 million and 4 million, respectively, from Qatif at the present time, and that these figures will drop off over the next ten years to 7 million and 2½ million, respectively.

The call also states that a reserve source of natural gas will be the Khuff Field. I am told that there will be no gas available from the Khuff Field.

The only point I want to make is that before anyone goes ahead with serious consideration of a fertilizer or any other use of Qatif

MEMORANDUM FROM GARRY OWEN

JEDDAH, SAUDI ARABIA

TO: -2-

that requires an assured supply of saturn gas. I think a careful review should be had with our production people regarding the potentially available amount of gas, its characteristics, and other technical problems.

With kindest regards,

Sincerely,

GARRY OWEN

GO/f

[redacted]

[redacted]

[redacted]

February 14, 1958

[redacted]

Dear Sal:

[redacted]

I have just received a communication from Larry Sun which I appreciate below:

[redacted]

[redacted]

"The only point I wish to make is that before anyone goes ahead with serious consideration of a fertilizer or any other type of plant that requires an assured supply of natural gas, I think a careful review should be had with our production people regarding the potentially available amount of gas, its characterization, and other technical problems."

Sincerely yours,

Harold J. Haynes, Director
Oil Operations Division of Saudi Arabia

TELEGRAM

Foreign Service of the
United States of America

OUTGOING

RALPH D. LAMIE
INDUSTRIAL CHEMIST
[illegible]
[illegible]

November 15, 1953

Mr. Roland J. Corson
American Embassy (USA)
APO 515 (Box 1), c/o PM
New York, N. Y.

Dear Joyce:

Received your letter of November 5, 1953 with description of chemical plant enclosed.

I am indeed interested in the building of this plant. I have already sent the information either to or the main office of the engineers that I represent on chemical processing matters abroad.

As you will note, the brochure is descriptive only and is not specific enough for an engineering firm to hazard even a guess as to the probable cost. It does, however, describe what they want and to what extent (generally) the first step in formulating plans and specifications for the completed project.

The next step as I see it, is to actually lay out the plant in specific detail, prepare a set of blueprints that will represent exactly what is wanted, then supply a complete set of specifications covering each small detail so that any bidder will know exactly what he is bidding on and that no misunderstandings will occur after the contract is awarded.

As an example of what I am talking about, considerable leeway is allowed at various places. For each place, for each piece of equipment, there might be several different types, sizes, etc., that would suit the purpose. Unless specific information is given, the contractor will be allowed to substitute what he thinks is best. This, of course, might be one of the many things that would cause trouble.

FORM DS-4
1-1-51

DEPARTMENT OF STATE
TRANSMITTAL SLIP

CLASSIFICATION

TO

R. J. Corson
Embassy, Jidda, Saudi Arabia

DATE

12/2/53

TRANSMITTED FOR

	INFORMATION OF THE DEPARTMENT'S REPRESENTATIVES		INFORMATION OF THE FOREIGN OFFICE
	TRANSMISSION TO THE FOREIGN OFFICE		APPROPRIATE REPLY TO THE INDIVIDUAL
	SUBMISSION OF A REPORT TO THE DEPARTMENT. REFER TO _____		INFORMATION OF THE REPRESENTATIVE OF THE FOLLOWING U. S. AGENCY: _____ (Agency)

ADDITIONAL REMARKS

Enclosed is a copy of the Clare gas contract which has been executed.

WHEN A REPLY TO THE DEPARTMENT IS INDICATED PLEASE WRITE BY THE FIRST MAIL AND NOT TELEGRAPH UNLESS

SIGNATURE

TITLE

CLASSIFICATION

OFFICE

6. The cost of the activities covered by this Task Order shall not exceed $60,000.

7. Representatives Authorized. The FDA designates as its representative authorized to determine the scope of the work and to accept the results of the work performed under this Task Order: Chief, Office of Industrial Resources.

8. All the provisions of Agreement No. 225-83-7018, dated June 30, 1983, between the parties hereto are incorporated herein by reference, with the same force and effect as though fully set forth herein.

FOR THE NATIONAL ACADEMY OF SCIENCES:

Walter S. Smith
Executive Officer

Edward J. Harrison
Director for Contracts Administration
Office of the
Comptroller

TELEGRAM

Foreign Service of the United States of America

OUTGOING

CHARGE: [redacted] Classification Control: [redacted]

TO: [redacted]

DATE: Oct. 31, 1980

ADDR

[redacted] inquiring status [illegible] project. Has contract [illegible] branch [illegible] been signed? If so forward copy to [illegible].

ADDR

THE FOREIGN SERVICE
OF THE
UNITED STATES OF AMERICA

American Embassy,
Jidda, Saudi Arabia,
October 8, 1953.

Mr. Garland A. Bevan,
ECA,
Jidda.

Dear Mr. Bevan:

The attached report from the United States Information Service at Dhahran is forwarded for your information.

Sincerely yours,

Clifford L. Wilson
Second Secretary of Embassy

UNITED STATES INFORMATION SERVICE
6 Sh. Shaikh Sarailah, Sardar City, Okra

PAKISTAN TAKE CONSTRUCTION CONTRACT

WASHINGTON, September 30--Construction of Pakistan's new fertilizer plant will be undertaken in Sahibpur di Mudhal, Punjab, the United States Operations Administration (T.C.A.) announced yesterday.

TCA officials reported that ground water, just completed, over the Mudhal location to be most favorable for the production of ammonia sulphate, urgently needed in the Indus River Valley food development program.

The plant is being designed by Mitre Bloodgun Sahib, L.L. of Brussels and when in operation is expected to produce 30,000 tons of fertilizer annually.

The estimated cost of the plant is between $3 million and $5 million, of which T.C.A. will furnish an initial $2 million.

Louis L. Lemon, one of America's foremost coal classification experts, is expected to believe there in will help complete plans on the design of the fertilizer plant. Lemon will return in a fabrication when actual work on the project begins.

Lemon will act as an adviser on the construction of the Indus River plant and will serve as a liaison officer between TCA and the Pakistan Industrial Development Corporation.

Lemon is continuing the work started by Jones L. Lemon, an American chemical engineer, who completed the survey and planning phase of the technical cooperation on the project.

Construction of the plant is expected to be completed in three to four years.

[illegible]

[illegible]

TELEGRAM

INCOMING

Foreign Service of the
United States of America

DEPARTMENT OF STATE
WASHINGTON

SPECIAL - UNOFFICIAL

AIR MAIL

[redacted]

a market survey covering all products indicated as practical for manufacture from the raw materials available. The competitive situation will be appraised and after having determined the quantities of a product, or line of products, which could be absorbed in the markets, an estimate will be made of plant and production costs of appropriate type units. The problem of financing will follow and an indication of possible profits determined.

The following list of chemicals and products for which chemicals will be used indicate generally the scope of the survey:

Sulphur
Carbon Black
Caustic Soda
Chlorine
Elemental Phosphorus
Insecticides
Synthetic fibres
Wetting agents
Synthetic rubber
Soil conditioners
Anti-knock additives of aviation gasoline
Ammonia
Ammonium Sulfate
Urea
Ammonium Nitrate
Phosphate and Potash Fertilizers

Petrochemicals will be the basis of many of these products and where of high value could stand high transportation costs.

The interest of the countries in the Middle East in such a regional approach will be encouraged and the participation of each sought. The services of competent local geologists and chemical engineers and the assumption of local costs are specific items that will be sought from the local governments.

CONFIDENTIAL

April 20, 1955

TO : John Dunaway, Acting Country Director, T.C.A.

FROM: K. R. Crawford, Third Secretary of Embassy.

Radio Near East (Cyprus) on April 20 gave a broadcast summarized as follows:

"Reports from Bahrain say that British companies there are preparing a project by which gaseous wastes will be used for lighting and heating, at very cheap prices, by the countries of the Middle East. These companies plan to convey the gaseous wastes from Persian Gulf oil fields in a pipeline linking this area with the Mediterranean. British experts are confident that this project will cause a revolution in the heating and lighting systems of the Middle East.

Plans are being laid at present to use Bahrain gaseous wastes in Lighting Manama, the capital of Bahrain."

For your own information Radio Near East is commonly thought to be a British-subsidized unofficial sort of C.B.C., used for putting across propaganda and dubious rumors that the B.B.C. could not touch.

(Not for Publication)

Original of this given to
Mr. Dunaway

Fertilizer Project

AIRGRAM LETTER EXPRESS

FOR INFORMATION OF: The Files

March 24, 1953

FROM Beirut Letter 38, dated February 27, received March 23

FERTILIZER PROJECT: Development of the Near East countries agriculturally and industrially point to a market study of the area as a whole, and this point of view has been confirmed in the conferences we have held on this subject.

The April 1949 report of J. E. Hoover on the utilization of natural gas in Saudi Arabia for production of nitrogen fertilizers, the November 1952 report by J. E. Hoover on a synthetic nitrogen fertilizer works at Basra, Iraq and the Stone and Webster report of 1949/1950 on the industrial utilization of natural gas in Saudi Arabia are insufficient for this over-all project and need to be brought up to date.

It is being recommended that a group be set up as follows:

1. A manager or equivalent qualified to head up and evaluate the project. It is advisable that this person be a chemical engineer with broad industrial experience, including nitrogen, sulphur, caustic, chlorine and derivative chemicals.

2. A survey should be made of the raw materials available in Saudi Arabia and adjacent countries. It should include a survey of the water, labor, and transportation situation. An up-to-date appraisal of the flare gas available in Saudi Arabia should be made and include quality, grade and type.

3. A market survey should be made covering all the products which may be indicated as practical for manufacture from raw materials under 2 above.

4. Having determined the material and the markets the competitive situation should be evaluated.

5. Having arrived at the quantities which could be absorbed in the markets then an estimate should be made of the plant and production costs of appropriate type units.

6. It will be seen that many of these items are interlocking and subject to adjustment as the project develops. The problem of financing can follow the above studies and an indication of possible profits determined.

7. The following partial list of chemicals and products for which chemicals will be used will aid in determining the scope of the surveys

Sulphur
Carbon black
Caustic Soda
Chlorine
Chemicals Phosphorus

Ammonia
Ammonium Sulfate
Urea
Ammonium Nitrate
Phosphate and Mixed Fertilizers

Synthetic rubber
Soil conditioners
Anti-knock additives for aviation gasoline

Petroleumdeals will be the basis of many of these products and share of

[illegible] value could stand high transportation costs.

7. A figure of 150,000 is considered safe to proceed with this project and a period of 4 to 6 months necessary for completion of same.

WEEKLY LETTER EXCERPTS

FOR INFORMATION OF: The files March 24, 1953

FROM Series Letter 38, dated February 27, received March 23

FERTILIZER PROJECT: Development of the Near East countries agriculturally and industrially points to a market study of the area as a whole, and this point of view has been confirmed in the conferences we have held on this subject.

The April 1949 report of J. H. Stover on the utilization of natural gas in Saudi Arabia for production of nitrogen fertilizers, the November 1952 report by J. H. Stover on a synthetic nitrogen fertilizer works at Basra, Iraq and the Stone and Webster report of 1949/1950 on the industrial utilization of natural gas in Saudi Arabia are insufficient for this over-all project and need to be brought up to date.

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3. A market survey should be made covering all the products which may be indicated as practical for manufacture from raw materials under 2 above.

4. Having determined the material and the markets the competitive situation should be evaluated.

5. Having arrived at the quantities which could be absorbed in the markets then an estimate should be made of the plant and production costs of appropriate size units.

6. It will be seen that many of these items are interlocking and subject to adjustment as the project develops. The problem of financing can follow the above studies and an indication of possible profits determined.

7. The following partial list of chemicals and products for which chemicals will be used will aid in interesting the scope of the surveys

Synthetic rubber
Soil conditioners
Anti-knock additives for aviation gasoline

Petrochemicals will be the basis of many of these products and where of high value could stand high transportation costs.

7. A figure of $50,000 is considered ample to proceed with this project and a period of 4 to 5 months necessary for completion of same.

March 13, 1962

Memorandum for: Ambassador Hare

The International Bank for Reconstruction and Development (i.e., World Bank) is not likely to be available for consideration as an agency to finance such Saudi Arabian projects as the railway and the fertilizer plant. The Bank's charter provides that its resources and facilities 'shall be exclusively for the benefit of members' (III, section 1(a)).

The charter further provides that membership in the Bank is open to members of the International Monetary Fund. The charter does not expressly say that no other countries shall be admitted to membership in the Bank, but it seems most unlikely that countries not members of the IMF would be considered for membership in the Bank.

It seems impracticable for Saudi Arabia to join the IMF because of the provisions of the IMF charter regarding gold (Article IV, section 2), which provide that members may only buy and sell gold on the basis of par value, i.e., $35.00 per ounce.

I am sending a copy of this memorandum to Mr. George A. Alvarez of the IMF for comment.

Memo to Mr. Stratton

March 13, 1958

Memorandum for: Mr. Jamieson

Mr. [illegible] of March believes that Saudi Arabia has a material advantage over Iran as a site for the proposed fertilizer plant using waste gas. You will recall that he was interested in establishing such a plant, and that the World Bank experts have recommended creation of such a plant in Iran.

Mr. Dodd points out that the Saudi Arabian plant could be located near the port of Ras Tanura, thus giving it a big advantage in relative materials for construction and operation and in exportation of the product as compared with a plant located inland in Iraq or Iran. In fact, he feels that a plant located there would be only a fraction of the cost of a comparable plant in Iran.

Mr. Dodd further is of the opinion that the state find it advantageous to make a loan with Pakistan for purchase of the output. Pakistan is both a dollar country and is in need of fertilizer.

Arthur H. Young

File 1

American Library
Riyadh, Saudi Arabia
March 5, 1953.

Mr. Thomas F. Collier
Manager, International Division
Arthur Research Foundation
Illinois Institute of Technology
Technology Center
Chicago 16, Illinois

Dear Mr. Collier:

I have your letter of February 11 in regard to the activities of the Foundation which might be of interest to our work in Saudi Arabia.

There are several fields in which industrial research might be undertaken but the arrangements will be made by the Ambassador with the ministerial organization administration. One important project now being considered is the utilization of natural gas in manufacture of fertilizer and possibly other by-products. We may also need the aid of technicians in charging a testing and testing manufacturing plant.

I am referring your letter to Mr. J. Thomas Dyer, Assistant Administrator, Riyadh, Via Washington, for consideration.

Very truly yours,

John A. Jenney
Acting U. S. Director of
Technical Cooperation in
Saudi Arabia

cc: Mr. J. Thomas Dyer

File in

TECHNICAL COOPERATION ADMINISTRATION
Jidda, Saudi Arabia

February 15, 1953.

Dr. H. H. Anderson
U.P.I.B.A.S.
Agricultural research Administration
U. S. Department of Agriculture
Beltsville, Maryland

Dear Dr. Anderson:

[illegible] I should appreciate it if you will please forward to me one copy each of the following reports:

[illegible]-available fertilizers, 1952

Liquid fertilizers

Liquid ammonia as a fertilizer

Supplemental irrigation along the eastern seaboard-1952

Proceedings of the National Joint Committee on Fertilizer Application, 1951

Sincerely yours,

[illegible]
Chief, Agricultural Division

File 1 -
Confidential

NATIONAL COMPANIES AGENTIMATION
Dhahran, Saudi Arabia

February 17, 1953.

SUBJECT: Mr. Ralph Hammond, Director, Middle East Office for technical cooperation

THRU: Mr. John A. Jamieson, acting U. S. Director of technical Cooperation in Saudi Arabia

TO: Request for translation and transmission letter to His Excellency, the Minister of Finance, re Utilization of Gas from the Saudi Arabian Oil Fields

It would be appreciated if you could arrange for the translation and transmission of the attached letter to His Excellency, the Minister of Finance.

This letter concerns the utilization of gas from the Saudi Arabian Oil Fields.

John A. Jamieson
acting U. S. Director of
technical Cooperation in
Saudi Arabia

Riyadh, Saudi Arabia

February 17, 1953.

His Excellency,
The Minister of Finance,
Kingdom of Saudi Arabia.

Your Excellency:

I have the honor to inform you that the survey of distribution of gas from the Saudi Arabian Oil Fields is receiving attention of the Technical Cooperation Administration in Washington. At a recent conference of high ranking officials in Washington, the following recommendations were made:

That in view of the fact that reports on this project made by an American Engineering Company and a record of the Food and Agriculture Organization has four and two years old respectively and are insufficiently comprehensive, a new study should be made as a basis for determining the quality products which could be manufactured and marketed under present competitive conditions, such as nitrogen fertilizer, dry ice, carbon tetrachloride and solvent for gole rubber and chemical mixture, chloroform, cement and carbon black, for sale in the world markets.

It is further recommended that as soon as the approximate cost of the survey can be determined the Saudi Arabian Government will be informed for the purpose of arriving at a definite project agreement mutually satisfactory to both Governments and specifying the contributions to be made by each.

Your Excellency will no doubt be interested to learn that a study is now being made in Iraq by an Italian company to determine the feasibility of distributing natural gas for a radius to service this growing needs. It is the opinion of the technical cooperation administration that at the basis of the experience gained in the distribution of gases may be obtained.

I have the honor to be,

Your Excellency,

Your most obedient

F-1

TELEGRAM RECEIVED

FROM: [illegible]

DATE: Feb 12, 1953

CODE:

CONFIDENTIAL

RECEIVED: Feb 13, 1953

[illegible]

[illegible]

As a result meeting February 6 with representatives IBRD TCA and EXPA re industrialization Saudi Arabia following recommendations under:

In view records Aloyo and Yabaten and Messrs A and B cases old respectively and insufficiently comprehensive, new study should be made basis present reports as first step to determine specific products which could be competitively manufactured and marketed even as nitrogen fertilizer (with possible combination tie-in to phosphate and potash as saleable regionally) elemental sulphur, petrochemicals, cement, carbon black.

It is proposed that as soon as cost can be established and if GOA agrees a firm project request be prepared including GOA's rate contribution and forwarded initiating study estimated roughly 3 months. Estimate costs to be supplied counsel by TCA/W. For your info Iraq has under study industrialization its flared gases by D and J and J Ringrose Ltd, London which report expected March. Feasibility technical economic may be clarified after availability data reports.

Feasibility calculates temporary detail consultation Clark Davis formerly DOD and engineer with Iraq fertilizer plant now Cairo.

[illegible]

CONFIDENTIAL

Mr. Speaker

III. PROGRAM (Continued)
Miscellaneous
Fertilizer Projects

engineer to his staff to make further
getting the plant built and in operati
talk with Mr. Johnson. He is familiar
and is of the opinion that we should
reason of FAO's removed activity, from
some, that the problem from here on is
management which FAO is incapable of h
fertilizer industries in the several
it will have to stop short of intrepid
effective completion.

From my talks with Messrs. Johnson
FAO has no clear-cut idea as to how th
it recognizes, however, that help migh
some from abroad. FAO would, I think,
American company - preferably one with
line - leaving it to the private sect
can, whether a company with sufficient
chance on this proposition rushes to
private investment is not very forthcom
will prove sufficiently profitable to
of how favorable the terms of the agre

As you know, the Bankers Investing
should be looking here, and there is
the hopes of progress along this line
advance might arouse. Under the present
to take care of the other projects alre
developments in Washington.

Proposed Natural Gas Technician Project

Employment of a technician to advise TVA in the use of natural gas and other industrial development problems is being considered. At this time it is not known in the field whether this technician will be a regular TVA employee or a contracted person.

Partitioning Plants: Mr. Eskr
laborer reports is not available
jurisdiction of Mr. James Murr
Avenue, New York 22, New York.
problem from the beginning and
inquiries. I hope you will be
have not already done so.

The Natural-Gas Partiti

Yesterday afternoon, Pal
with the Minister of Finance
informed of the present situ
which Dr. Ikram explained.
expressed satisfaction with
status of your recent negot
impracticability of buying
Iran with those of Saudi Ara
view that Saudi Arabia does
countries. In the remarks
inadvisable to grant a visa
that of a countries since Mr
such, however, that he
that the Minister refused
engineer engaged by him.
he had to send from all
requested the withdrawal

Natural Gas
Fertilizer

WEEKLY LETTER EXCERPTS

FOR INFORMATION OF: _____

From Weekly Series Letter 32, dated January 16, read in Riyadh Jan. 18.

"Fertilizer Project: In addition to the Stoever Report of Utilization of Natural Gas in Saudi Arabia for the Production of Nitrogen Fertilizers sent you in a previous letter, it is suggested that you secure a copy of the Stone and Webster Engineering report on Industrial Industrialization of Natural Gas in Saudi Arabia. This report was written for the Arabian American Oil Company, and we have been informed that copies are available in Saudi Arabia through Gerry Owens.

"We believe that the success of the Fertilizer Project depends upon securing a man competent to handle not only the Fertilizer Project, but also competent to work on all aspects of industrial development. He should be a commerce and industry technician, competent to work on all aspects of industrial development.

"We expect to move rapidly on the recruitment of a good man and also to supply as much background information as is available in Washington so that an adequate prospectus may be developed."

WEEKLY LETTER EXCERPTS Jan 21, 1953

TO: _____

Weekly Letter 30, 8 Jan 53, read 20 Jan

REFERENCE: In response to your telegram of December 17, regarding the establishment of a fertilizer plant in Saudi Arabia, a meeting was held in the office of George Ross, TCA, Chief of Commerce and Industry Assistance Staff, attended by interested parties in TCA. It was decided at this meeting that a study should be made of fertilizer production and needs. Based upon that study an over-all recommendation would be made as to TCA's participation in a program to increase the available supply of fertilizer in TCA's area of responsibility. Another meeting is scheduled at the Department of Agriculture on Friday, January 2nd, 1953, the outcome of which will be reported in our next letter.

Fifth Point 4 Fertilizer: We note with interest the consideration of the proposed fertilizer plant. There seems to be nothing useful that we can do at this end for the moment, but if there is I am sure you will let us know.

From Sealtate - RESTRICTED - 498 sent Feb 3, read Feb 4

REGARDS Meeting held Friday principal interested parties industrial utilization waste gases. Progress made selection technical advisor and best approach develop this project. Details via air. WATSON

December 19, 1952

MEMORANDUM FOR THE FILES

This memorandum was prepared on December 17, 1952, in response to the telegram from Jidda by Mr. Dryer on December 14. In this cable Mr. Dryer indicated he had discussed the proposal of utilizing natural gas, now being found in Saudi Arabia, in the manufacture of fertilizer.

At a meeting held in Mr. George Ross' office, attended by Mr. Ross, Mr. Malcom Jones, Mr. Gill, Mr. McCown and Mr. Taylor, it was decided that prior to sending a memorandum to Mr. Andrew's, a study of fertilizer production and needs should be studied and then an overall recommendation would be made, reference TCA participation in a program to increase the available supply of fertilizer in TCI's area of responsibility.

Mr. Ross was to check on the status of the Pakistan Plant and Malcolm Jones was to attempt to arrange to have someone in Agriculture Department assigned the job of putting all available information together.

SecState

December 14, 1952.

RESTRICTED

TOTSO from Fryer.

1. F.I.I. In riyadh on December 13 Minister Finance SAG gave all assurances Stretton and Fryer sair agreement for rural improvement and development will be signed upon presentation him Arabic version now undergoing translation in office Fin Min and urged speedy activation.

2. Finance Minister also gave considerable encouragement to hope of Saudi's participation in regional flare-gas fertiliser project. (Fryer's discussion with Andrews) and recommended TCA initiative to bring into being.

HARR

ERFryer/D 12/14/52
Stretton

SAU-8/Add.1
12 December 1952
RESTRICTED

REQUEST FOR TECHNICAL ASSISTANCE UNDER THE EXPANDED PROGRAMME

ADDENDUM

The TAA has informed the Executive Secretary that the FAO and TAA have agreed that responsibility for the implementation of the request from the government of Saudi Arabia in the field of Chemical Fertiliser Production should be assumed by TAA. This project is part of the request circulated as SAU-8.

MEMO FOR TOA FILES
Riyadh Visit Dec.12,13

Mr. Fryer brought up the question of a fertilizer plant to be built on the Red Coast where waste gas from the oil wells could be used as a source of power. Mr. Fryer presented the project as a regional one with a possibility of gas being piped from Iraq, Kuwait, and other oil fields. The Minister gave various reason why he felt it should be a Saudi Arabian project solely, but said he was willing for TOA to explore the possibilities of importing gas from neighboring countries.

On the whole, he seemed to be enthusiastic about the project and expressed the view that the Saudi Arabian Government would undertake a large part of the financing.

Both Mr. Fryer and I felt that the visit to Riyadh was successful as well as a very interesting experience.

Dhahran, Saudi Arabia
November 28, 1951

CONFIDENTIAL

The Honorable Raymond A. Hare
American Embassy
Jedda, Saudi Arabia

Dear Mr. Ambassador:

Dr. Hart, Mr. Hearne and I discussed in Dhahran the question of possible use of waste gas as power to produce chemical fertilizer. This question arose because any serious development of agriculture here would call for large amounts of fertilizer. Soil tests are needed to determine just what kinds and amounts. Shaikh Abdulla Sulaiman is interested in finding some means to utilize this gas, including this possibility.

I have discussed the subject superficially with some of the Aramco people. I learned that at their instance Stone and Webster have completed in the last few weeks what is described as a report six inches thick on the use of the waste gas. This report is now receiving the study of Aramco engineers both here and in New York. In substance Stone and Webster stated that for about $30 million a plant could be built that would produce 150,000 metric tons yearly of ammonium nitrate; and for about $35 million a plant to produce 250,000 metric tons yearly of ammonium sulphate. Because of the Company's need for sulphur in its operations, and the tightness of sulphur supply, they appear especially interested in the second project. They indicate that Aramco is not interested in investing itself in such a plant, but that it might be developed by funds derived from the Government or from local capitalists.

We understand also that Mr. Stover made a report to the Food and Agriculture organization on the subject of possible creation of such a plant here, estimating the cost at a figure reported to be about $60 million.

If the Saudi Arabian Government or local interests should wish to invest money in such a project, a question would arise whether there would be any objection to encouraging it on the ground that such a plant could easily be converted into production of munitions, the location being relatively near to centers of Russian power. This mutual security angle presumably would be of interest to the Department of Defense.

A question also would arise whether such a plant, if established here, could supply chemical fertilizer for export. There is a world shortage of this at present, and a plant here would be well located to meet demands in other Near Eastern countries and also in India, Pakistan and Japan.

Sincerely yours,

Arthur H. Young

March 13, 1952

Memorandum for: Dr. Stratton

Mr. J. T. Duce of Aramco believes that Saudi Arabia has a material advantage over Iraq as a site for the proposed fertilizer plant using waste gas. You will recall that SAO is much interested in establishing such a plant, and that the World Bank experts have recommended creation of such a plant in Iraq.

Mr. Duce points out that the Saudi Arabian plant could be located near the port of Ras Tanura, thus giving it a big advantage in receiving materials for construction and operation and in exportation of the product as compared with a plant located inland in Iraq or having to rely on pipline gas for a considerable distance.

Mr. Duce further is of the opinion that SAO might find it advantageous to make a deal with Pakistan for purchase of the output. Pakistan is both a Moslem country and is in need of fertilizer.

Arthur R. Young

Copy to Embassy, Jidda

MEMORANDUM FOR THE FILE

November 20, 1950

Fertilizer Manufacturing Project

Recently I have had several conferences with Mr. J. S. Flower (about report on a proposed fertilizer plant for Saudi Arabia I have sent to you) about the possibilities of getting a fertilizer manufacturing works established in Saudi Arabia at this time to utilize waste natural gas from oil production.

Mr. Flower has just completed the planning of a nitrogen fixation works for erection at Basra, Iraq which appears to be very attractive from economic and business standpoint. He suggests, however, that the works could probably be even more advantageously established at Dammam, Saudi Arabia, since the gas from the Qatif field contains more sulfur than does the gas from the Kuwait field near Basra.

The plant would be somewhat similar to the plant formerly proposed for Saudi Arabia, except that in order to reduce the capital investment the capacity would be halved to produce only 125,000 metric tons of ammonium sulfate annually and the surplus hydrocarbon gas would be used for producing 24 million pounds of carbon black and 100,000 tons of cement annually.

It is estimated that such a plant would probably cost less than $30 million and could be operated with a maximum working capital of $3 million.

The annual gross income is estimated at $14.3 million and the cost of operation including amortization of the plant over 15 years at 6-1/2% interest per annum is estimated at about $4.3 million, giving an estimated profit of about $7 million annually.

The cost of the plant would probably need to be financed entirely by the Saudi Arabian Government, with its own resources plus the aid of a $30 million loan. The plant to be operated by an operating company controlled jointly for that purpose, which would supply the management and operating capital.

It is suggested that the operating company market all fertilizer produced in the Saudi Arabian Government and in Kuwait, which interests would be well experienced in the manufacture and marketing of ammonium sulfate, carbon black and cement. The plant might be leased to the operating company for a term of years, say 25 with options of renewal, under a fair rental that a certain minimum would be a portion of the net profit, say 20%, after deduction of the rental and all charges have been before any further basis.

Should you find that the Saudi Arabian Government is inclined to like this idea and the plant to be operated by an operating company controlled jointly for that purpose, which would supply the management and operating capital,

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Should you find that the Saudi Arabian Government is inclined to like this idea and the plant to be operated by an operating company controlled jointly for that purpose, which would supply the management and operating capital,

TECHNICAL ASSISTANCE BOARD

References: TAB/SAU/Ref.40/64
22 October 1964

CONFIDENTIAL

AGREEMENT

COUNTRY: Saudi Arabia

ORGANIZATION: FAO

REQUEST OR OFFER: Request by Saudi Arabia

TYPE AND DATE OF AGREEMENT: Supplemental Agreement to T.A. 30 January 1956.

ASSISTANCE TO BE PROVIDED:

One chemical engineer (fertilizers) to make visits to Saudi Arabia as required during a period not exceeding 12 months. This expert will assist and advise the Government in drawing up plans and specifications for the construction of a fertilizer manufacturing plant, or plants, utilizing the natural gas from oilfields, or refinery operations. On the basis of proposed plans and specifications, and after bids have been received, the expert shall assist and advise the Government in letting the construction contract and completing the plant and placing it in operation.

The Organization shall furnish equipment to a value not exceeding US $1,000.

ADMINISTRATIVE ARRANGEMENTS:

1. The Government shall pay to the expert a subsistence allowance including board, lodging and incidental expenses, payable monthly in advance, at rates not less than those applicable to officials of equivalent standing employed by the Government, and shall provide him with adequate office accommodation and secretarial help, further details regarding the terms of service to be agreed upon between the Government and the expert.

2. The Government shall provide the expert with transport in the country for official duties, including transport of personal and office equipment, and all customs, transportation and other charges in connection therewith. The Government shall also provide for the transport of the expert's personal effects on first appointment to the country and on termination of his service.

3. The Government shall provide the expert with adequate medical facilities free of charge.

4. The Government shall provide the expert with adequate insurance cover against accidents while travelling on official business.

ANNEX III

EXCERPT FROM SUPPLEMENTAL AGREEMENT NO. 3

BETWEEN THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
AND
THE ROYAL COURT OF SAUDI ARABIA
FOR THE PROVISION OF TECHNICAL ASSISTANCE
TO THE GOVERNMENT

ARTICLE I

Technical Assistance to be Provided

(a) The Organization shall, within the limits prescribed in the Basic Agreement, arrange for nine (9) experts and seven (7) assistants (hereinafter called "the Personnel") to visit Saudi Arabia (hereinafter called "the Country") as soon as all arrangements have been made and for a period not exceeding twelve (12) months except as provided for in paragraph (iii) below, to develop detailed plans up to the point of final preparation for construction for a water and land development scheme on the Wadi Jizan in the Jizan Plains area.

(i) One irrigation engineer to be responsible for the overall planning of the area and, in cooperation with the other Personnel, for the development of a national plan feasible from engineering and cost considerations, for the best use of the land and water resources and to advise the Government on the steps to be taken to implement this plan.

(ii) One irrigation Engineer (hydrologist), to investigate the potentialities for the construction and utilization within the development scheme of dry dams and diversion structures and to design these structures within the limits prescribed by the Basic Agreement.

(iii) One Engineering Geologist who will make visits to the Country as required during a period not exceeding twelve (12) months to evaluate dam and reservoir sites and to advise upon materials to be used in the building. The number and frequency of such visits shall be determined by the Organization in consultation with the Government.

(iv) One Soil Scientist to make soil surveys and land classifications, outline and to assist in formulating the plan for land development.

(vi) One Data Management expert to study present system of management and organisation of farms, to evaluate proposed crop and livestock systems and to advise on recommended system of management and organisation including the sizes and layouts of farms.

(vii) One Civil Engineer to conduct necessary field surveys.

(viii) One Meteorologist, to establish a weather data collecting system, to instruct weather station operators in the techniques of record taking and to assist in evaluating precipitation conditions in the Wadi Jizan area, and also throughout South West Arabia.

(ix) One Driller, to carry out core drilling operations for foundation exploration at potential dam site locations.

(x) an Engineering Office Assistant to assist in maintaining engineering records and to serve as a draughtsman.

(xi) Two Surveyor Assistants, including one transitman, one leveller and two chainmen.

(xii) One Technical English/Arabic/English interpreter, and one Administrative assistant for general and stenographic office work, correspondence and typing of reports.

(b) The services of a limited number of Personnel shall be made available by the Organization as soon as possible to assist the Government in the planning and initial operations involved in executing the Wadi Jizan land development scheme. The composition and number of Personnel to be included in this initial part shall be determined by the Organization. The timing of the visits of the remaining Personnel shall be determined by the Organization in relation to the availability of the Government counterpart personnel, the requirements of the detailed work.

(c) If and when the aforementioned plan or project should be approved, the Organization will, subject to the availability of funds and personnel available, provide experts (to be agreed upon under terms mutually acceptable to the Government and the Organization) to advise and assist the Government in activities and training for the implementation of the plan.

ANNEX II

EXCERPT FROM SUPPLEMENTAL AGREEMENT NO. 4

BETWEEN THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
AND
THE GOVERNMENT OF SAUDI ARABIA
FOR THE PROVISION OF TECHNICAL ASSISTANCE
TO THE GOVERNMENT

ARTICLE I

Technical Assistance to Be Provided

(a) The Organization shall, within the limits prescribed in the Basic Agreement arrange for one mineral engineer (fertilizers) (hereinafter called "the Personnel") to make visits to Saudi Arabia (hereinafter called "the Country") as required during a period not exceeding twelve (12) months, as soon as all arrangements have been made, for his prompt visits. The additional duration (if any), the number and frequency of visits to be made by this engineer shall be determined by the Organization in consultation with the Government.

To assist and advise the Government in drawing up plans and specifications for the construction of a fertilizer manufacturing plant, or plants, utilizing the natural gas from oilfields, or residues from refinery operation. On the basis of proposed plans and specifications, and after bids have been received, the expert shall assist and advise the Government in letting the contract(s) granted and completing the plant and placing it in operation.

(b) Subject to the necessary funds being available to the Organization, the period of service referred to in paragraph (a) above may be varied by agreement between the Organization and the Government from time to time hereafter.

2. Provide one (1) Fellowship for a person nominated by the Government and approved by the Organization, for a period not exceeding six (6) months for training as a fishery adviser (hereinafter called "the Fellow") who shall take an active and continuing part in the project upon which the Organization is providing advisory assistance as set forth in this Supplemental Agreement, and who requires further training outside the Country in order to carry on the work initiated by the Personnel. The program of study shall be determined by the Organization on the basis of recommendations to be made by the Personnel referred to in paragraph 1 above, after consultation with the Ministry of _____.

TA-90/Saudi Arabia/3/4
14 January 1952

SUPPLEMENTAL AGREEMENT NO.4
BETWEEN THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
AND
THE GOVERNMENT OF SAUDI ARABIA
FOR THE PROVISION OF TECHNICAL ASSISTANCE
TO THE GOVERNMENT

The Food and Agriculture Organization of the United Nations (hereinafter called "the Organization") and the Government of Saudi Arabia (hereinafter called "the Government") desire to implement the Basic Agreement for Technical Assistance concluded between them under date of 20 August 1950, the provisions of which are by reference made a part hereof.

THEREFORE, the Organization and the Government have entered into this Supplemental Agreement No.4 through their undersigned duly authorized representatives:

ARTICLE I

Technical Assistance to be Provided

(a) The Organization shall, within the limits prescribed in the Basic Agreement arrange for one chemical engineer (fertilisers) (hereinafter called "the Personnel") to make visits to Saudi Arabia (hereinafter called "the Country") as required during a period not exceeding twelve (12) months, as soon as all arrangements have been made, for the provision of the technical assistance described below. The number and frequency of visits to be made by this engineer shall be determined by the Organization in consultation with the Government.

To assist and advise the Government in drawing up plans and specifications for the construction of a fertiliser manufacturing plant, or plants, utilising the natural gas from oilfields, or residues from refinery operations. On the basis of proposed plans and specifications, and after bids have been received, the expert shall assist and advise the Government in letting the construction contract and completing the plant and placing it in operation.

(b) Subject to the necessary funds being available to the Organization, the period of service referred to in paragraph (a) above may be extended by agreement between the Organization and the Government from time to time hereafter.

ARTICLE II

Liaison

The Government designates _____ as the central coordinating agency for the purpose of Article VIII(a) of the Basic Agreement as applied to this Supplemental Agreement and as the agency with which the Organization shall deal in connection with the technical assistance provided under this Supplemental Agreement.

ARTICLE III

Detailed Administrative and Financial Obligations.

(a) The obligations of the Organization under Article III(a) of the Basic Agreement shall be subject to the following provisions:

(i) The Organization shall determine the necessity of its providing any equipment (and the type thereof) not procurable within the Country. The Organization shall furnish such equipment according to the rules of the Technical Assistance Board to a value not exceeding US $1,000 (One thousand dollars).

(b) The obligations of the Government under Article III(b), (c), (d) and (e) of the Basic Agreement shall be subject to the following provisions:

(i) The Government shall pay to the Personnel during the period of his assignment in the Country a subsistence allowance including board, lodging and incidental expenses payable monthly in advance, at rates set from time to time by the Technical Assistance Board for the Country. The operative rate and any subsequent amendments shall be notified by the Organization to the Government by letter. The Government instead of making payments in local currency, shall whenever mutually agreed upon, furnish directly the lodging or lodging and board specified above. The lodging provided shall be of a standard in keeping with the professional and international status of the Personnel. Whenever the Government provides any part of the subsistence in kind, the amount of subsistence to be paid in cash shall be adjusted by mutual agreement between the Government and the Personnel, according to the formula set out by the Technical Assistance Board.

(ii) The Government shall provide adequate transportation for the Personnel within the Country and all telephone, telegraph, postal and other communication expenses necessary for the provision of the technical assistance described herein.

(iii) The Government shall provide office facilities, equipment and supplies the adequacy and type of which shall be determined by the Personnel.

(iv) The Government shall establish a local currency fund to cover the cost of the locally-incurred services and the other services referred to in Article III of the Basic Agreement. The initial amount at the time of establishment of this fund shall be _____ and at no time shall it be less than _____ [illegible]

behalf of the Personnel by a designated officer of the Government on the basis of requests certified from time to time by the Personnel, in amounts necessary for the orderly and efficient conduct of his work.

(v) Before the arrival of the Personnel the Government shall make such administrative and financial arrangements as are necessary for the prompt execution of the above arrangements.

IN WITNESS WHEREOF, the Government and the Organization have signed this Supplemental Agreement at _____ this _____ day of _____ 19__, in two copies in English. The Supplemental Agreement shall be in force as from this date.

For the Government of Saudi Arabia:

_____

_____
(Title)

For the Food and Agriculture Organization of the United Nations:

_____

_____
(Title)

Stone & Webster Engineering Corporation

REPORT
ON
INDUSTRIAL UTILIZATION OF NATURAL GAS
IN SAUDI ARABIA
FOR
ARABIAN AMERICAN OIL COMPANY
NEW YORK, N. Y.

* * * * * * * * * * *

CONCLUSIONS

The possibilities of utilizing natural gas in Saudi Arabia for industrial purposes have been investigated. The conclusions reached from these investigations are given under subject headings which follow. A summary of the projects, costs, gas consumed and payouts is given in Table #5. The scope of this report does not encompass any use of natural gas in the Company's own development program nor does it include any studies connected with the Company's petroleum operations.

One of the difficulties in developing industries in Saudi Arabia is utilizing natural gas at high conversion cost, resulting in capital costs approximately double those of the United States. Another difficulty is the high cost of operation which may be reduced in time but will probably require many years to become competitive with more developed locations. These costs are high because of the necessity of transporting all materials to Saudi Arabia from outside countries, and constructing supporting facilities such as town, road systems, hospitals and recreation centers. Technical and supervisory manpower must be imported.

An additional disadvantage is that only a small proportion of the products from Saudi Arabian industries could be sold locally and manufacturing plants would be mostly dependent upon export markets. Freight rates and competition from European sources would place any competitive industry in Saudi Arabia in an unfavorable position. Under these conditions, tariffs imposed by the market countries could make even an attractive venture fail.

The conclusions reached on the various projects are based on evaluating the initial capital cost, annual net operating costs, depreciation, availability of potential markets and the transportation costs to them, estimated profits, natural gas consumed and length of payout.

DIRECT SALE OF NATURAL GAS

Present potential daily sales of natural gas to countries near Saudi Arabia are between 40 and 80 million cuf. This volume of sales is too small to make a natural gas pipeline of between 4,500 to 8,000 miles long a profitable venture. From the studies it appears that future requirements for natural gas in the surrounding countries would not be sufficient to warrant consideration.

SHORTAGE OF LOCALLY AVAILABLE ENERGY SOURCES

Markets for liquefied petroleum gases in Saudi Arabia and surrounding countries are small and, therefore, the erection of a plant for recovering major quantities of LPG including propane from natural gas with a view of selling this product either locally or to distant customers does not appear warranted

SULFUR RECOVERY

Recovery of sulfur has been found to be uneconomical because of the high construction cost of plants, disadvantages in freight rates to European markets and the high cost of plant operation. Its payouts range from 10 to 30 years. A change in current market prices of sulfur, the development of a project requiring sweet gas which would absorb its sulfur recovery units or the installation of a fertilizer plant which would utilize local sulfur production would reduce these payouts materially.

CARBON BLACK FABRICATION

The production of carbon black in Saudi Arabia would result in a payout time of seven to eight years, which is considered too long for this project. Should the price of channel black increase, making the recommendation more favorable, this project should be reevaluated.

FERTILIZER FABRICATION

The production of fertilizers in Saudi Arabia would lead to a payout of over seven years. The low cost of natural gas has little influence on the economics of fertilizer plants. A plant located in the Middle East might be of value to the economy of that part of the world however, other countries in the area have certain competitive advantages over Saudi Arabia. Investment opportunities in fertilizer production facilities, installation of a fertilizer plant in Saudi Arabia may not be justified at the present time on an economic basis only.

CAUSTIC SODA AND CHLORINE PRODUCTION

The capital investment required for the production of caustic soda and chlorine by the electrolysis of brine shows a payout of ten years, which is excessive for this project. The payout is based upon the premise that both chlorine and caustic soda could be sold; this is unlikely.

PRODUCTION OF SYNTHETIC ORGANIC CHEMICALS

The production of synthetic organic chemicals includ chlorinated hydrocarbons, alcohols and acids by the Fisher-Tropsch process or by direct addition of light hydrocarbons, methanol by high pressure synthesis, and acetylene and its derivatives by the electric arc process requires large capital investments, the production of synthetic organic chemicals does not appear to be economical as there are many sales problems to be solved and the freight rates to markets are competitive difficult. Based on these considerations, the payouts would be excessive.

COAL GASIFIER

Steam power plants are responsible where water is available. In run of river plant efforts to shortage over steam power plants if a charge is made for fuel gas. Gas turbines are responsible where there is little water and the heads are relatively high. The cost of power generation in both cases is not sufficiently low to attract industries that depend on low cost power.

the studies indicate that the average investment required for the installation of plants to between $1 and $3 per mcf per day. Based on a mean value of $2.00, the digestion of 100 million mcf per day of natural gas would require a capital investment of $600,000,000. Even if a reasonable payout were forecast, investments of this magnitude from private capital are dependent on future developments in the Middle East.

The electrometallurgical production of aluminum and magnesium consumes large amounts of power in proportion to the dollar value of these products. In considering if these industries could operate profitably in South Arabia, it is necessary to evaluate the costs of transporting raw materials long distances compared with the advantages of low cost natural gas and electric power. Analysis indicates that, due to high construction, labor and transportation costs, these products do not appear attractive.

Development of new processes in the future might permit the economic conversion of natural gas to liquid products that may be transported and handled in the same manner as crude oil. If this comes about, the problem of natural gas utilization will, to a large measure, be solved. Currently, such processes are too expensive to be considered.

The gradual economic development of South Arabia will utilize a portion of its natural gas for oil manufacturing

installations should be made with a view to taking advantage of this low cost fuel. However, the amount of natural gas thus utilized would be only a small fraction of the total annual production. The economic growth of the Middle East, particularly the relatively large industrial centers in India, Pakistan, Egypt and Turkey, will affect the feasibility of natural gas utilization in Saudi Arabia in the future.

For these reasons, it may be concluded that it will not be economically feasible for any years to attempt to conserve natural gas in Saudi Arabia by developing means for its use.